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BULLETIN

OF

THE PENNSYLVANIA MUSEUM

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COLLECTION OF JAPANESE HELMETS

Mr. John T. Morris recently has added materially to the Museum's collection of Japanese armor by the gift of a series of helmets, "brassarts," tassets and leg pieces, also one full suit of armor, purchased by him at the sale of the Klauder Collection in this city. While none of the objects secured goes back to any great antiquity, nearly all, if not all, precede the abolition of feudalism in Japan and most of the pieces probably date back considerably from that event.

The history of Japanese armor may broadly be said to begin with the establishment of the Shogunate in 1192, when the higher development of the military classes started. Hammered iron armor of classic form, however, is known to have existed in the eleventh century and some fragments of the primitive period known as Fujiwara (800-1100) have been accumulating in the Museum at Neno Park, Tokyo, and in the Imperial Treasure House at Nara, as a result of the researches undertaken in the past three decades under the sanction of the Japanese authorities. Rare fragments of copper scales, some of which were gilt, seem to go back to the ninth century, and, in the shape of scales of hardened hide or "cuir bouilli" called "Kawara," armor may be carried even further back. Indeed, through legendary allusions some students have traced its use to the third century. But, as Mr. Bashford Dean says in his luminous "Handbook", (1) it is probable that, in such cases, reference is made to thickly-padded textiles outwardly decorated in silk and brocade, and distinctly Chinese or Corean in character.

Mr. Conder records that "in 780 an order was issued by the government that leather armor should be used because the kind hitherto worn was continually requiring repairs. The order permitted the use of iron instead of leather, and advised that all armor should be gradually changed to metal."

"Prior to 800," according to Professor Bashford Dean, (2) "helmets appear to have been made of cotton padding in the shape of Chinese helmets," and the first iron helmets commonly used appear in the time of Kwammu Tenno, about A. D. 800, although such were occasionally seen prior to that date. To this period also is referred the copper armor of which fragments

⁽¹⁾ No. 14. "Catalogue of the Loan Collection of Japanese Armor." Prepared by Bashford Dean, Ph.D. Published by the Metropolitan Museum of Art, 1903.
(2) Ibid.

are preserved at Tokyo. Gilded bronze, no doubt, was used as gala armor for centuries after armor came into use. The earlier the armor, the larger the scales.

In the archaic period, helmets were usually made of a few bands of iron riveted together, and breastplates were occasionally of one piece, corresponding with those worn in Eastern Europe. Indeed, Mr. Dean regards the earliest metal armor of Japan as betraying relationship with that of Eastern and Central Russia.



JAPANESE HELMETS of the Tokugawa Period The one on the left is made up of 80 Laminæ John T. Morris Collection

At the close of the Fujiwara period (twelfth century), the laminæ composing the "Hachi," or bowl, of the helmet sometimes became riveted together in a radial pattern, thereby acquiring greater strength. The mask at that time rarely covered the nose and was of a single piece.

During the Kamakura period (1100-1336), helmet decorations were evolved. Hornlike processes appear called "Kuwagata" and representing leaves of "Kuwai"; i. e., the water plant botanically known as "Sagittaria.' These at the base were often finished with a central ornament (mayédate)—originally some object or totemic animal in some way connected with the warrior and adopted by him as a distinctive emblem or crest. These helmets have a "Shikoro," or couvre-nuque, of enormous circumference, and extrav-

agantly developed "Fukigayeshi," or rolled ear-coverings. Primitively, these consisted of only a few rows of laminæ and the ear-pieces were formed by the mere rolling outward of these.

The distinctive changes in the next, or Ashikaga, period (1336-1600) were that the ear-flanges were reducd, rarely more than two bands of the neck-guard rolling out to form them. The "Hachi," or bowl, which in early times often is depressed, presents an exaggerated opening at the top. Through this, according to Mr. Dean's Japanese informer, the brain of the warrior was supposed to come into closer contact with heavenly influence. In the earlier



JAPANESE HELMETS
of the Tokugawa Period
The one on the left possibly of the Seventeenth Century
John T. Morris Collection

stages it had been closed with a pear-shaped ornament, symbolic of Buddhistic omnipotence.

Now, also, the radial laminæ composing the "Hachi" become more numerous, as many as twenty or more appearing on either side, sometimes accompanied with ornamental plates. In helmets of simpler form, a single plate extends from the "hachiman" opening to the peak, bearing three ornamental ridges of bronze or gold terminating in a leaf of the "icho" (ginko) tree, or in heads of serpents. In higher grade helmets the number of radial laminæ increases, and these are at times incrusted with precious metals. As ancestral metal helmets were handed as heirlooms from father to son for many generations, and as they were reverently used by succeeding descendants, remounted and made to appear with added accessories, upon which was lavished the

highest skill of the armorer's art, it is not uncommon to find a primitive "Hachi" accompanied by later accessories. Some of the best examples of the work of the famous Mochin family of armorers date from this period.

Modern armor, from 1600-1868, technically belongs to the Tokugawa period, which was one of feudal tranquility. To this, the collection which interests us belongs. Now was developed parade armor; but little or no incentive was offered for the improvement of war-harness and a period of lavish decoration occurred in the seventeenth and eighteenth centuries, when Japan's soldiers "appeared like Samurai, their Samurai like Halamoto, their Halamoto like higher Daimyos" and the use of armor became general. Experts declare that ninety-five per cent. of suits offered to-day are of Tokugawa type. The armor is lighter, more closely modeled to the body, and the parts covering the extremities are reduced. The "Hachi" is small, closely fitting. In one class, the laminæ are the narrowest ever used. An extraordinary example made by a late member of the Mochin family is said to be composed of as many as five hundred laminæ riveted together.

In the John T. Morris Collection there are a number of fine helmets of this order in which the "Hachi" is formed of from fifty to eighty or more laminæ. Some are adorned with closely set rivet-heads of different sizes, others are simply ridged where they join, but this ridging by turning over the edge is of remarkable closeness and marvelous neatness. In several specimens in which the "Hachi" is formed of fewer radial laminæ, decorative bands of iron are riveted over the latter—some half way, others at various distances converging toward the "tenko," or "hachimau-za"—that is, the ornamental metal finish of the orifice which, in some specimens is a beaded edge while in others it reaches in two or more ridges, the proportions of an open-work railinglike ornament. Many of the finer specimens bear an inscription on the inside giving name of armorer.

One helmet is in four sections, each decorated with a highly ornate, though flat, design of rococo feeling. This specimen is of heavier manufacture and is older than the other examples.

Gradually, in the course of the Tokugawa period, the ear-pieces of the helmet became rudimentary—sometimes less than one inch in length, a contrast to the enormous ear-pieces of earlier days. This is the case with the helmets of the Morris Collection of which one specimen alone, of the seventeenth century, shows a well-defined reminiscence of the extraordinary "Fukigayeshi" of the preceding ages, while in all others the part has become atrophied almost beyond recognition. The neck-guard is also close and made of numerous laminæ, and, as in other parts of the armor, strips of metal, lacquered or covered with leather, replace the bands which in earlier periods had been of scale laminæ closely knit together by lacing.

It is at this time also that Japanese heraldry appears with its crests representing different, yet similarly, grotesque and fearsome animal-heads with long outstanding ears and gilt crescentlike horns, varying in size and expression. In one specimen the hornlike processes assume the general outline of a crustacean's claws. Another is adorned with the "Kuwagata," springing from a central ornament of finely drawn gilt chrysanthemums. A student

of Japanese heraldry might more or less determine the meaning of these emblems—suns, moons, fishes, plants and other crests (Mon). At this time banners were also used lavishly.

While as we have seen, in earlier times the mask, "Tengu," did not cover the nose, later it covered the entire face. There are specimens of these in the Morris Collection, as well as of half-masks. The intention appears to have been at this time to make the mask as grotesquely repellant and as awe-inspiring to the enemy as possible. To this effect a fierce mustache and bushy eyebrows were added.

The series as it stands, with that already in the possession of the Pennsylvania Museum, forms a valuable nucleus, which no doubt from time to time will receive accessions making for the completion of a truly representative collection of Japanese armor.

S. Y. S.



PURCHASES AT THE ROBERT HOE SALE

In addition to the large bronze figure of Tara, which was bought at the Hoe sale and presented to the Museum by Mr. John T. Morris (see article

on the subject in this issue), several other important purchases were made, among which the following described objects are worthy of note.

An ivory group representing the Virgin and Child, of Spanish workmanship of the seventeenth century, is a beautiful example of carving and coloring. The Virgin is shown in a standing position, heavily draped and wearing a crown, and carrying in her left arm the Child, while in her right hand she holds a lily. This figure, which is ten and one-half inches in height, has been presented to the Museum by Mrs. John Harrison.

A hard paste porcelain teapot decorated in relief, on one side a mythological group, on the other the representation of the "Judgment of Paris," is perhaps one of the finest examples of genuine Capo di Monte porcelain in this country. The modeling is beautifully executed in the characteristic style of that factory, while the tint of the paste is an indescribable bluish green, never found in the modern imitations. The Museum now possesses a little group of five examples of fully authenticated hard paste Capo di Monte which are probably the only genuine pieces to be found in the museums of this country.



IVORY CARVING
Madonna and Child
Seventeenth Century, Spanish